Omry Ben-Ezra, et al. Serial No.: 10/560,654 Filed: May 1, 2006 Page 13

Remarks

This application contained claims 1-360, the current status of which is as follows:

- (a) Claims 21-25, 27-45, 164, 166, 168, and 185 have been currently amended.
 - (b) Claims 170-172 were previously presented.
- (c) Claims 165, 167, and 173-174, 175-184, and 186-188 are as originally filed.
- (d) Claims 1-20, 46-163, and 189-360 were previously canceled in order to reduce excess claims fees, and claims 26 and 169 have been currently canceled without prejudice. The Applicant reserves the right to prosecute these claims in one or more divisional applications.

No new matter has been added.

Claim rejections under 35 U.S.C. 102

Claims 21, 23, 27, 28, 164, 166, 170, and 171 were rejected under 35 U.S.C. 102(b) as allegedly being anticipated by US Patent 5,928,269 to Alt. While not necessarily agreeing with these rejections, the Applicant has amended independent claims 21 and 164 to recite that the current is configured to increase atrial motion without terminating the occurrence of the atrial fibrillation (AF), i.e., without cardioverting the AF to normal sinus rhythm (NSR). In contrast, Alt describes techniques for "cardiovert[ing] atrial fibrillation to sinus rhythm" (abstract). The Applicants thus submit that independent claims 21 and 164, as amended, are not anticipated by Alt, and are therefore in a condition for allowance. All of the other pending claims directly or indirectly depend from these allowable claims, and are therefore also in a condition for allowance.

The amendments to claims 21 and 164 are supported in the

Omry Ben-Ezra, et al. Serial No.: 10/560,654 Filed: May 1, 2006 Page 14

specification as filed by at least the following: "In an embodiment, control unit 32 modulates the vagal stimulation as follows: . . . during a "high" stimulation period . . .; during a "low" stimulation period, . . . the control unit configures the vagal stimulation so as to cause the atrial cells to contract with "rebound" strength (although, because of the AF, the atrial cells typically remain unsynchronized during this rebound contraction)" (p. 53, lines 18-28; emphasis added). Thus, during repeated alternations between the "low" stimulation periods, the occurrence of the AF continues and the atrial cells remain unsynchronized. (The Applicant notes that, embodiments contrast, some other described specification of the present application include techniques for cardioversion of AF, such as on p. 15, lines 8-23, and p. 55, line 20 - p. 57, line 22.)

Claims rejections under 35 U.S.C. 103

Claims 22, 24, 25, 29-31, 165, 167, 168, and 172-174 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Alt and further in view of US Patent Application Publication 2003/0045909 to Gross et al. Claims 29, 32, 35-37, 39, 42, 43-45 172, 175, 178-180, 182, 185, and 186-188 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Alt and further in view of US Patent 6,341,236 to Osorio et al. Claims 33, 34, 38, 176, 177, and 189 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Alt in view of Osorio, and further in view of Gross et al. Claims 40, 41, 183, and 184 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Alt in view of Osorio, and further in view of US Patent 6,256,537 to Stoop et al.

Applicants respectfully submit that each of the combinations of references being relied upon in support of the rejections under \$103 fail to teach or suggest at least one element of the pending

Omry Ben-Ezra, et al. Serial No.: 10/560,654 Filed: May 1, 2006

Page 15 ·

claims, namely a current configured to increase atrial motion without terminating the occurrence of the AF. Therefore, all of the pending claims are in a condition for allowance.

Other claim amendments

Claims 21 and 164 have been amended to recite that the subject suffers from atrial fibrillation (AF), and the current is applied during an occurrence of the AF. These amendments are supported in the specification as filed by at least the following: "In an embodiment, the electrode device is adapted to be coupled to the tissue of the subject, the subject suffering from atrial fibrillation (AF) or from increased risk of thromboembolic events" (p. 21, lines 29-31). "In an embodiment, the apparatus includes a sensor adapted to detect an occurrence of atrial fibrillation (AF) and generate a sensor signal responsive thereto, and the control unit is adapted to receive the sensor signal, and to drive the electrode device to apply the current during the occurrence of the AF" (p. 22, lines 3-6). "identifying" language of claim 164 also finds support in claim 166 as originally filed. Conforming amendments have been made to claims 23, 25, 166, and 168.

Furthermore, claims 21 and 164 have been amended to recite that the current is configured to <u>increase</u> atrial motion. These amendments are supported in the specification as filed by at least the following: "In an embodiment of the present invention, control unit 32 drives electrode device 22 to apply signals to vagus nerve 24, and configures the signals so as to <u>increase</u> atrial motion" (p. 53, lines 13-15; emphasis added).

Claims 21-25 and 27-45 have been amended to replace "adapted" with "configured." Claims 25 and 42 have been amended to replace "comprising" with "further comprising." Claims 168 and 185 have

Omry Ben-Ezra, et al. Serial No.: 10/560,654 Filed: May 1, 2006

Page 16

been amended to more positively recite the elements of these claims.

Applicants note that the amendments described in this section have not been made responsively to the rejection of these claims.

Applicants believe the amendments and remarks presented hereinabove to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, Applicants respectfully submit that all of the claims in the present application are now in order for allowance. Notice to this effect is respectfully requested.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

Omry Ben-Ezra, et al. Serial No.: 10/560,654 Filed: May 1, 2006

Page 17

No fee is deemed necessary in connection with the filing of this if any additional However, fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,

hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:

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